

REMARKS

Reconsideration of the application is requested in view of the amendments above and the remarks below. Claims 31-39 were cancelled and new Claims 40-47 were added. In view of the modifications above, the remarks below refer to newly added claims. Applicants acknowledge the withdrawal of the rejection under Metzner.

Rejection of Claims 31-39 Under 35 USC 112, second paragraph

The Office Action rejected Claims 31-39 under 35 USC 112, second paragraph, on the grounds that the recited phrase "halogen" was unclear. In view of the modifications above, the rejection is believed overcome. Applicants appreciate the Examiner's suggested wording. Reconsideration is requested.

The Office Action rejected Claims 31-39 under 35 USC 112, second paragraph, on the grounds that the phrase "acrylate dispersions" rendered the claims indefinite. Applicants respectfully disagree. When read in light of the specification, the term "acrylate dispersions" would be readily understood by one of ordinary skill in the art. Reconsideration is requested.

Rejection of Claims 31-39 Under 35 USC 102

1. Rejection Under 35 USC 102 Over U.S. Pat. No. 5,990,143 (Ludwig)

The Office Action rejected Claims 31-39 under 35 USC 102 over U.S. Pat. No. 5,990,143 (Ludwig). The rejection should be withdrawn in view of the amendments above and the remarks below. In view of the amendments above, the remarks below are directed to the newly added claims.

The literal teachings of Ludwig do not disclose every element of Applicants' invention. It is well settled that in order for a prior art reference to anticipate claim, the reference must disclose each and every element of claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in art of claimed invention, but such presumed knowledge does not grant license to read into prior art reference

teachings that are not there. See *Motorola Inc. v. Interdigital Technology Corp.* 43 USPQ2d 1481 (1997 CAFC). It is also well settled that when a claimed invention is not identically disclosed in a cited reference under 35 U.S.C. 102, but instead requires the skilled artisan to pick and choose among a number of different options disclosed by the reference, then the reference does not anticipate the claimed invention (See *Mendenhall v. Astec Industries, Inc.* 13 USPQ2d 1913, 1928 (Tenn, 1988) *affd*, 13 USPQ2d 1956 (Fed. Cir. 1989).

Applicants' invention relates to a storage stable aqueous system comprising (A) a component selected from the group consisting of dichlofluanid, tolylfluanid, fluorfolpet, and mixtures thereof, and (B) one or more binders having a $\text{pH} \leq 7$ selected from the group consisting of (i) alkyd resins based on vegetable oils and (ii) acrylate dispersions. The invention also relates to a method for stabilizing a component selected from the group consisting of dichlofluanid, tolylfluanid, fluorfolpet, and mixtures thereof, in an aqueous system, in which the process incorporates into the aqueous system one or more binders having a $\text{pH} \leq 7$ and selected from the group consisting of (i) alkyd resins based on vegetable oils and (ii) acrylate dispersions, and thereby stabilizes the component and forms a storage stable aqueous system. In another embodiment, the invention relates to a method for protecting an aqueous system against microbial infestation. And in another embodiment, the invention relates to binder comprising an aqueous storage stable system containing (A) a component selected from the group consisting of (i) alkyd resins based on vegetable oils and (ii) acrylate dispersions and having a $\text{pH} \leq 7$ and (B) a component selected from the group consisting of dichlofluanid, tolylfluanid, fluorfolpet, and mixtures thereof.

Ludwig discloses water-based solvent and emulsifier-free microbicidal active compound formulations based on azole fungicides and at least one quaternary ammonium fungicide of a specific formula. Ludwig discloses a composition that is prepared by combining at least one azole fungicide in the form of the free base and at least one quaternary ammonium fungicide (See Col. 2, ll. 16-67). The weight ratio of azole fungicide to quaternary ammonium fungicide is preferably 1:99 to 99:1 (Col.

3, ll. 23-24). Ludwig teaches that to prepare aqueous formulations, the active compounds are incorporated individually or as an active compound combination, such as in the form of powders, granules, pastes or concentrated solutions, suspensions or emulsions, into water by simple mixing, and are then present in the form of an aqueous suspension, solution or emulsion (Col. 3, ll. 26-31).

Such disclosures do not anticipate Applicants' invention encompassed by the newly added claims. Ludwig disclosing a composition that is prepared by combining at least one azole fungicide in the form of the free base and at least one quaternary ammonium fungicide does not anticipate Applicants' aqueous storage stable systems or the other embodiments encompassed by the new Claims.

Similarly, Ludwig teaching that the weight ratio of azole fungicide to quaternary ammonium fungicide is preferably 1:99 to 99:1 or that to prepare its aqueous formulations, the active compounds are incorporated individually or as an active compound combination into water by simple mixing does not disclose Applicants' invention. Even if Ludwig discloses fluorfolpet as a possible active ingredient, it discloses such an active ingredient as one of many "mixing partners" at Column 5, lines 55+ such that one of ordinary skill in the art would have had to pick and choose from many possibilities and would not possess Applicants' invention.

Ludwig discloses that many other compounds as synthetic resins or acrylic resins can be added to the formulations. Further, among a lot of other specific mixing partners, sulfenamides (as dichlofluanid) are mentioned. There is no disclosure of the specific combination of the presently claimed combination of compounds and the specific alkyd resin and/or acrylate dispersion binders. As can be seen from Examples 1 to 4, Ludwig discloses only combinations of specific quaternary ammonium fungicides with tebuconazole. The literal teachings of Ludwig simply do not disclose every element of the claimed invention in as complete detail as is contained in the new claims. Reconsideration is requested.

2. Rejection Under 35 USC 102 over U.S. Pat. No. 3,113,399 (Eversole)

The Office Action rejected Claims 31-39 under 35 USC 102 over U.S. Pat. No. 3,113,399 (Eversole). The remarks below refer to the new claims.

Eversole does not anticipate Applicants' invention. Eversole is directed to a seed coated with a non-phytotoxic paint vehicle which upon drying is insoluble in water (see Claim 1) and which paint is selected from acrylic resins, alkyd resins, polyester resins, hydrocarbon resins, maleic resins, phenolic resins, oil modified polyurethane resins, vinyl copolymer resins and chlorinated resins (see Claim 5). According to Example II, an aqueous seed coating is disclosed containing water, maleic anhydride modified drying oil and Captan as a fungicide.

By contrast, Applicants invention encompasses aqueous formulations which are storage stable over a long time period and which contain the compounds dichlofluanid, tolylfluanid, fluorfolpet (or methods which use such compounds). Such disclosures do not anticipate Applicants' invention. Reconsideration is requested.

Rejection of Claims 31-39 Under 35 USC 103

1. Rejection Under 35 USC 103 Over U.S. Pat. No. 5,990,143 (Ludwig)

The Office Action rejected Claims 31-39 under 35 USC 103 over Ludwig. In view of the amendments above, the remarks below are directed to the newly added claims.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

In view of the modifications above, the rejection does not establish a *prima facie* case of obviousness. Ludwig teaches water-based solvent and emulsifier-free

microbicidal active compound formulations based on azole fungicides and at least one quaternary ammonium fungicide of a specific formula. Ludwig discloses a composition that is prepared by combining at least one azole fungicide in the form of the free base and at least one quaternary ammonium fungicide (See Col. 2, ll. 16-67). The weight ratio of azole fungicide to quaternary ammonium fungicide is preferably 1:99 to 99:1 (Col. 3, ll. 23-24). Ludwig teaches that to prepare aqueous formulations, the active compounds are incorporated individually or as an active compound combination, such as in the form of powders, granules, pastes or concentrated solutions, suspensions or emulsions, into water by simple mixing, and are then present in the form of an aqueous suspension, solution or emulsion (Col. 3, ll. 26-31).

One of ordinary skill in the art following the teachings of Ludwig would have prepared a composition by combining at least one azole fungicide in the form of the free base and at least one quaternary ammonium fungicide and would not have arrived at Applicants' aqueous system or the other embodiments encompassed by the newly added claims. Similarly, the other teachings of Ludwig would have motivated one of ordinary skill in the art following the teachings of Ludwig to modify Ludwig, make inventions that are different from Applicants' invention encompassed by the newly added claims. Ludwig teaches numerous compounds such that one of ordinary skill in the art would have had to pick and choose from many possibilities and would not have information that would have led the artisan to Applicants' invention and expect the results Applicants have obtained.

2. Rejection Under 35 USC 103 over U.S. Pat. No. 3,113,399 (Eversole)

The Office Action rejected Claims 31-39 under 35 USC 103 over U.S. Pat. No. 3,113,399 (Eversole). In view of the amendments above, the remarks below are directed to the newly added claims.

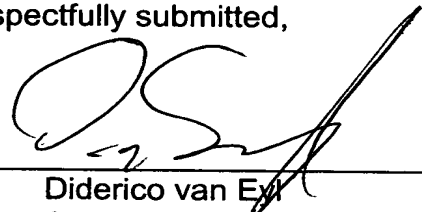
Applicants submit that Eversole does not render the present invention obvious. For the compounds dichlofluanid, tolylfluanid, and fluorfolpet it is known in the art that they are very sensitive to hydrolysis in aqueous formulations. Surprisingly in the presence of the specific binders B) the sensitive compounds dichlofluanid,

tolyfluoride, and fluoropolymer are storage stable in aqueous medium over a long time period. This result could not be foreseen from the knowledge of Eversole. Example II of Eversole does not deal with storage stable formulations. According to Example II, the aqueous paint coating was prepared and immediately mixed with the seed corn and tumbled in a paint roller. After this procedure the surface of the corn was covered with a dry coating. Eversole does not contribute anything to the solution of the problem how to prepare storage stable formulations of hydrolysis sensitive substances. Eversole lacks the teachings that would have motivated one of ordinary skill in the art following Eversole to modify Eversole and make or practice Applicants' invention. Reconsideration is requested.

In view of the foregoing amendments and remarks, allowance of the newly added claims is earnestly requested.

Respectfully submitted,

By



Diderico van Eyl
Attorney for Applicants
Reg. No. 38,641

Bayer Corporation
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3069
FACSIMILE PHONE NO.:
(412) 777-2612

s:/sr/van Eyl/dve0604